AQUATIC RESOURCE EDUCATION PROGRAM HIGHLIGHTS

Aquatic Resource Education Program – California:

It funded and delivered a comprehensive Aquatic and Angler Education Program statewide with specific details, objectives, and activities under a series of program goals. It provided outreach programs for K-12 public and private schools as well as for education programs "outside of the classroom"; increased partnerships within the Department and other resource agencies; provided educational training to Community Partners; provided public outreach and education (displays, publications, web access, visitor centers); integrated and expand use of volunteers in program; and provided fishing instruction and angling opportunities with a conservation message. Under the Urban Fisheries Program – Fishing in the City, it provided outreach programs or K-12 and Private schools and education "outside the classroom" for home school, after school, and outdoor school students; supported and interpret fisheries habitat improvements; provided Californians with first-hand experiences of aquatic habitats to create awareness of needs of aquatic organisms and to build stewardship; and provided fishing instruction and angling opportunities in urban areas. Under the interpretive services, it was used primarily from Elkhorn Slough, Nimbus Hatchery and Newport Bay, maintaining and improving special programs, activity guides, teacher education programs and materials; developed literature, curriculum materials and informational brochures, newsletters, displays for variety of audiences; and provided public and education outreach programs. This project trained 60,000 participates in 2004.

Aquatic Resource Education Program – Washington:

Over 700 volunteers assist in program delivery which includes: 4H Fishing Program, Rotary Club International, Free-fishing weekend, Hot-spot Lakes, Washington Outdoor Women, and promoting responsible angling at boat and sportsman shows. Fishing-related information produced as CD's, fishing guides, and educational materials are provided. Trout as well as salmon are included with a greater emphasis on fish habitat, watersheds, wetlands, estuaries, and local stream protection. The program now reached 42,350 students and 800+ schools. The program also offered presentations at the Natural Resources Youth Camp and

Cascade Leadership Camp, two activities which target at-risk youth ages 12-16.
3. Watershed Stewardship – Nature mapping with the University of Washington GAP Analysis Project to connect students and volunteers with their real-world resources by gathering scientific data. Internet access provided data available to 30,000 Nature mappers statewide. This component has become a major building block for Washington Department of Fish and Wildlife (WDFW) volunteer monitoring initiative. The Pacific Education Institute, with WDFW as a partner, developed assessment tools to evaluate the success of programs that address improved student achievement. Project WILD Aquatic focuses educational activities at the watershed level, showing students how to gather data on streams and upland habitats. There were 150 classroom visits in addition to training other State/Federal staff in estuarine health/use and impacts on salmon. Photo courtesy of WDFW.

Freshwater Fisheries Center Education/Programs – Texas:

Located in Athens, Texas, this facility, funded through the Sport Fish Restoration grant programs and several other partnership efforts, provides facility tours, workshops and aquatic education classes for the general public, teachers and students. It also includes a visitor center which is attached to the state's premier hatchery. This is a large, high tech facility with many support systems, displays, buildings and grounds, including a wetland trail. Photo courtesy of Texas Parks and Wildlife Department.

Aquatic Resource Education – Missouri:

In Missouri the Aquatic Resources Education monies acquired through the Sport Fish Restoration Program are used to develop and deliver a wide variety of educational programs. During 2003 - 2004, nearly 20,000 people (mostly school children), learned to fish at Missouri Department of Conservation (MDC) led fishing clinics. The Show-Me Fish Mobile Aquarium brought Missourians face to face with native species of fish. Nearly a million people saw the aquarium last year as it toured the state at fairs, sport shows, nature centers, and shopping malls. MDC Naturalists and Education Consultants provided hundreds of educational

programs to Missouri public, parochial, private, and home schools. Stream Team volunteers donated over 100,000 hours of their time to caring for Missouri streams. The Sport Fish Restoration program helped MDC bring Missouri's aquatic resources into classrooms and neighborhoods, and provide opportunities for Missourians to enjoy, learn about, and take responsibility for those precious resources. Photo courtesy of MDC.

Aquatic Education Program – Alabama:

Both aquatic and hunter education funds are being used to show citizens of Alabama how much fun they can have in the great outdoors. The Alabama Department of Conservation and Natural Resources (AL DCNR) hosts the Alabama Expo at Oak Mountain State Park in Pelham, Alabama. Because of its close proximity to the city of Birmingham, Oak Mountain State Park is a great location for attracting an urban population. The Expo consists of several hands-on activities that offer participants exposure to fishing, shooting sports and archery in a fun, non-threatening atmosphere. Trained instructors managing the stations incorporate a strong emphasis in conservation. Events funded by Sport Fish Restoration include an aquatic touch tank, fishing pond, casting practice and fish art. Wildlife Restoration activities encompass several shooting sports such as shotgun, rim fire rifles, muzzle loading rifles, airgun and archery. Both Sport Fish and Wildlife Restoration dollars are being put to good use by attracting new participants to the fishing, hunting and shooting sports. Pictures provided courtesy of AL DCNR.

Aquatic Resource Education Program – District of Columbia:

The District of Columbia's aquatic education program connects kids to nature amidst the hustle and bustle of the nation's capital. In 2003, education staff gave over 120 classroom presentations on aquatic ecology, fish biology, wetlands, and the Chesapeake Bay to elementary, middle and high school students in all eight wards of the District. They also provided teacher training workshops for 189 educators; participated in school career days and science fairs; and published a quarterly newsletter of resource

information and activities for teachers. Angler education training includes both school clinics, that reached almost 1,200 youth; and the summer program, that provided over 1,000 youth the opportunity to learn to fish on the banks of the Anacostia and Potomac Rivers. Staff provided several other clinics at special events and maintained a tackle loaner program. Work continued on the expansion of the District's Aquatic Resource Education Center, located next to the Anacostia River, where new classrooms, exhibits, aquaria, offices and lab space are being added. Photo courtesy of District of Columbia Division of Fisheries and Wildlife.

Urban Fisheries Program – Nebraska:

The Nebraska Game and Parks Commission initiated its Urban Fisheries Program (UFP) in April 1999. The Program's goals are to improve recreational fishing in and around Nebraska cities and to provide more opportunities for urban residents to go fishing. The UFP is working to improve angler access to urban waters and assisting in the enhancement and restoration of urban lakes to provide improved and additional fishing opportunities. The UFP benefits from three of Nebraska's USFWS Dingell-Johnson grants. Lakes are renovated with grant funding; the lakes are stocked with fish from grant supported hatcheries; and aquatic education programs are provided through grant funding. In the past, many of Nebraska's urban lakes had poor or limited fish habitat and did not provide quality fishing opportunities. Fortunately, the Commission's Aquatic Habitat Program has been changing that, with lake and pond habitat improvement projects completed or underway across the state, with more planned in future years. As urban water bodies are restored, the UFP will assist in project planning and fisheries management on these waters, ensuring these waters provide quality angling for many years to follow. The UFP places a special emphasis on exposing urban youth and families to fishing. Working with the Commission's Aquatic Education Program, various city Parks and Recreation Departments, schools, civic groups, and other organizations, the program promotes family fishing clinics and events that encourage taking children fishing. Fishing tackle is available from the Aquatic Education Program for use at group events that teach newcomers to the sport how to fish. Volunteer fishing instructors are usually available to assist with teaching fishing techniques, fish identification, aquatic habitat protection, and other related topics.

Kuskokwim River – Alaska:

Eric Anderson, Aquatic Education Specialist, has an enviable job that includes traveling around Interior, Northern, and Western Alaska teaching topics such as watersheds, aquatic invertebrates, and fish. Eric took part in an innovative school program in Kalskag, located on the Kuskokwim River in Southwestern

Alaska. Junior high and high school students begin the school year by staying in a traditional fish camp for a week. The students set up camp and then spend the week hunting, fishing, and most importantly, learning from village elders. The Kuskowkim River receives all five species of Pacific salmon; resident whitefish, northern pike, and Arctic grayling are plentiful. Eric had planned for a systematic series of lessons on fly casting, fly selection, and technique and presentation before doing any actual fishing, but this was fish camp and of course, the kids wanted to fish. They practiced fly casting for only about 10 minutes, and then began clamoring for flies so they could fish. The elders in camp suggested the anglers walk upriver a bit to a small slough that should have northern pike. Within minutes of making short casts into the slough and stripping the flies back to shore, the kids started catching pike. Anything bright and flashy that dropped below the surface attracted this lie-in-wait predator – pink zonkers, Clouser minnows, Lefty's deceivers and the quintessential, all-purpose Alaskan fly – the egg-sucking leech. It was a satisfying walk back into camp that evening with each student holding a fish or two to augment dinner; a lesson on fish anatomy was combined with a lesson from one of the elders on how to cut and clean a fish. For the next two days Eric took the remaining students out fly fishing in small groups. They looked at many different types of aquatic insects in the slough that support the fish populations. It really helped the students understand what fly tiers attempt to mimic when tying those bits of fur and feather on hooks. Each group was able to bring back fish to contribute to the camp.